

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number
WO 2005/035495 A3

(51) International Patent Classification⁷: **A61K 31/4035**,
C07D 209/46, A61P 7/02, C07D 401/06, 413/04

(21) International Application Number:
PCT/IB2004/051922

(22) International Filing Date:
30 September 2004 (30.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1054/MUM/2003 8 October 2003 (08.10.2003) IN

(71) Applicant (for all designated States except US):
NICHOLAS PIRAMAL INDIA LIMITED [IN/IN];
100, Centrepont, Dr. Ambedkar Road, Parel, Mumbai,
Maharashtra 400012 (IN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LAL, Bansi** [IN/IN];
Quest Institute of Life Sciences, Nicholas Piramal India
Ltd., Next to Marathon Galaxy, Off L.B.S., Marg, Mulund
(West), Mumbai, Maharashtra 400080 (IN). **GAN-
GOPADHYAY, Ashok, Kumar** [IN/IN]; Quest Institute
of Life Sciences, Nicholas Piramal India Ltd., Next to
Marathon Galaxy, Off L.B.S., Marg, Mulund (West),
Mumbai, Maharashtra 400080 (IN). **RAO, Vadlamudi, V.,
S., V.** [IN/IN]; Quest Institute of Life Sciences, Nicholas
Piramal India Ltd., Next to Marathon Galaxy, Off L.B.S.,
Marg, Mulund (West), Mumbai, Maharashtra 400080 (IN).
GUPTA, Ravindra, Dattatraya [IN/IN]; Quest Institute
of Life Sciences, Nicholas Piramal India Ltd., Next to
Marathon Galaxy, Off L.B.S., Marg, Mulund (West),
Mumbai, Maharashtra 400080 (IN). **GOLE, Gopal,
Vishnu** [IN/IN]; Quest Institute of Life Sciences, Nicholas
Piramal India Ltd., Next to Marathon Galaxy, Off L.B.S.,
Marg, Mulund (West), Mumbai, Maharashtra 400080 (IN).
KULKARNI-ALMEIDA, Asha [IN/IN]; Quest Institute

of Life Sciences, Nicholas Piramal India Ltd., Next to
Marathon Galaxy, Off L.B.S., Marg, Mulund (West),
Mumbai, Maharashtra 400080 (IN). **KRISHNAN, Sridevi**
[IN/IN]; Quest Institute of Life Sciences, Nicholas Piramal
India Ltd., Next to Marathon Galaxy, Off L.B.S., Marg,
Mulund (West), Mumbai, Maharashtra 400080 (IN). **PAN-
ICKER, Radha, Bhaskar** [IN/IN]; Quest Institute of Life
Sciences, Nicholas Piramal India Ltd., Next to Marathon
Galaxy, Off L.B.S., Marg, Mulund (West), Mumbai,
Maharashtra 400080 (IN). **PINTO DE SOUZA, Eleanor**
[IN/IN]; Quest Institute of Life Sciences, Nicholas Piramal
India Ltd., Next to Marathon Galaxy, Off L.B.S., Marg,
Mulund (West), Mumbai, Maharashtra 400080 (IN).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

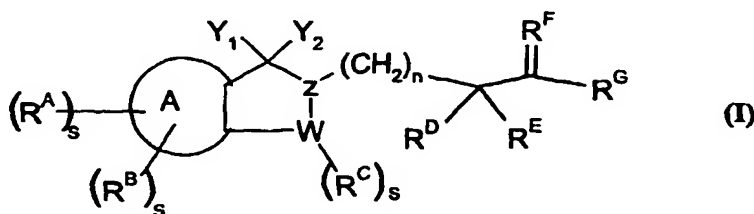
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report
— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

[Continued on next page]

(54) Title: **FIBRINOGEN RECEPTOR ANTAGONISTS AND THEIR USE**



(57) Abstract: This invention relates to novel fused bicyclic compounds of the general formula (I): wherein the symbols are defined herein, to pharmaceutical compositions containing the compounds, processes for preparing the compounds, and to methods of using the compounds, alone or in combination with other therapeutic agents. The compounds

are antagonists of the platelet glycoprotein IIb/IIIa fibrinogen receptor complex, and are therefore useful for the inhibition of platelet aggregation, and for the treatment of thrombotic diseases and other diseases.



(88) Date of publication of the international search report:

7 July 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.